

## Data sources for official statistics relating to migrant workers

When comparing LFS-based estimates of migrant workers with IPS-based estimates of net migration and immigration of people for work related reasons, and also with NINo allocations to migrants, **key points to note are:**

- The LFS estimates represent *stocks* whereas the IPS and NINos statistics represent *flows*.
  - The changes in stocks are net changes which are not comparable with estimates of migration inflows and outflows derived from the IPS .
  - The LFS migrant worker estimates are affected by residents entering and leaving employment over time as well as changes in population.
- None of the sources was designed specifically to measure current numbers and movements of migrant workers.
- The different sources do not identify migrants in exactly the same way.
- The LFS estimates relate just to permanent residents in households and exclude people in communal establishments (which includes people living on business premises such as hotels). The IPS and NINo statistics represent all forms of residency.
- The LFS estimates of non-UK born workers include some UK nationals born abroad who would not have been identified as migrants under the IPS.
- The sources carry different types and margins of error for the statistics derived from them and these can have a significant impact on comparisons.
- Work to attempt to quantify the effects of the differences in sources and methods underlying the available estimates of migrant workers is currently being undertaken by the ONS and will be reported on later this year.
- The LFS estimates of migrant workers relate to long-term migrants, similar to the IPS. It is likely though that some short-term migrants are also included, e.g. those who leave the UK within 12 months despite intending to stay longer when surveyed.
  - In contrast to the LFS and IPS, short-term migrants are a significant element of the NINos statistics.
- The LFS identifies workers by reference to paid work actually carried out, whereas the IPS estimates of those migrating for work-related reasons are based on intentions.

## Background detail

The main data sources are:

- the quarterly Labour Force Survey (LFS) and its annualised version, the Annual Population Survey (APS);
- the International Passenger Survey (IPS);
- National Insurance Number allocations to overseas nationals (NINos),

Estimates derived from the LFS of the **number of people aged 16 and over in employment by country of birth and by nationality** are published quarterly in the Labour Market Statistical bulletin. The estimates are averages for each quarter and are not seasonally adjusted.

The IPS is the primary source of estimates of Long-term International Migration (LTIM), published in the Migration Statistics Quarterly release (MSQR). The statistics include estimates of foreign nationals immigrating into the UK for work-related reasons.

The APS is the source of the estimated total population (all ages) of people by country of birth and by nationality, also published as part of the MSQR. The figures are annual averages of the total stocks.

The NINo statistics are derived from administrative data collected as part of the allocation of National Insurance numbers. Additional data from HMRC can be used to enable identification of non-UK nationals with NINos who have paid tax and/or claimed benefits in a specific period.

None of the available sources was designed specifically to measure current numbers and movements of migrant workers. The available estimates are a sub set of the information that each survey was designed principally to collect.

Work to attempt to quantify the effects of the differences in sources and methods underlying the available estimates of migrant workers is currently being undertaken by the ONS and will be reported later in the year.

### Key differences

The LFS and APS provide estimates of **stocks** whereas the figures derived from the IPS and the NINo registrations are **flows**.

- Stocks and flows are not comparable. Changes in stocks are between two points in time and show the **net effect** of all population changes, which can be significantly different from the gross inflows and outflows. The LFS migrant worker estimates are also affected by people moving into and out of employment.

The sources do not identify migrants in exactly the same way:

- The IPS classifies long-term migrants with regard to their intentions at the time of entry to the UK
- The LFS identifies migrants with regard to their country of birth and nationality at the time they are surveyed (and sometimes a migrant's nationality has changed since immigrating)

- The LFS estimates of non-UK born people include some UK nationals born abroad who would not have been identified as migrants under the IPS.
- The LFS estimates represent long-term migrants only but it is likely that some short-term migrants are surveyed, e.g. those who leave the UK within 12 months despite intending to stay longer when surveyed, thereby increasing the stock estimates of migrant workers slightly.

The LFS estimates relate just to permanent residents in households and exclude people in communal establishments (which includes people living on business premises such as hotels). The IPS and NINo statistics represent all forms of residency.

The LFS collects additional information on the time since arrival in the UK for those people who are foreign born. Estimates are available of migrant workers who have arrived in the UK in the last 12 months (or any other period). These give a broad indication of how the change in the number of migrant workers may have been affected by recent migration. However, they are not consistent with migrant inflows since they do not account for people who have left within the period.

The different sources carry different types and margins of error for the statistics derived from them.

- The LFS and IPS estimates are subject to sampling error, for example the current LFS-based estimate of the number of non-UK nationals in employment has a 95% confidence interval of +/- 120,000 (about +/- 4%).

The NINo statistics do not carry sampling error as they are derived from data collected on all applications. However, the administration system used was not designed primarily for statistical purposes and a degree of recording error may exist.

Nick Palmer

Labour Market and Households Division

ONS Newport

18 May 2016

Tel: 01633 455839

Email: [nicholas.palmer@ons.gov.uk](mailto:nicholas.palmer@ons.gov.uk)